

CLAIMS

1. An instantaneous coupling device comprising a tubular body (1) and means for retaining a pipe end in leaktight manner in the body, said means comprising a retaining member (5) arranged to receive the pipe end and cam means (11, 14) interposed between the body and the retaining member to bring the retaining member from a release state in which it releases the pipe end to a grip state in which it grips the pipe end when the retaining member is moved axially in the body from a first position to a second position, the device being characterized in that the retaining member comprises two independent jaws (5.1, 5.2) mounted in the body to slide between the two above-mentioned positions, and in that the cam means comprise 10 two transverse studs (11) secured to the jaws or to the body to co-operate in sliding with transverse surfaces (14) secured to the body or the jaws and that are inclined relative to the sliding direction.
2. A device according to claim 1, characterized in that each transverse stud (11) projects outwards from one of the jaws (5.1, 5.2), and in that the transverse surfaces (14) belong to the body (1).
3. A device according to claim 2, characterized in that the transverse surfaces (14) are defined in a hole (13) formed transversely through the body (1).
4. A device according to claim 3, characterized in that the hole (13) opens to the outside of the body (1).
5. A device according to claim 3, characterized in that, when the jaws (5.1, 5.2) are in the second position, the studs (11) leave a rear empty space (16) in the hole (13) 30 remote from the first position.

6. A device according to claim 4 or claim 5,
characterized in that, when the jaws (5.1, 5.2) are in
the second position, the studs (11) leave a front empty
space (17) in the hole beside the first position, and in
5 that the device includes removable abutment means (18,
(19) extending into said empty space.

7. A device according to claim 5 or claim 6,
characterized in that it includes additional cam means
10 (15, 11) interposed between the body (1) and the
retaining member (5) to bring the retaining member from
the grip state to the release state when the retaining
member is placed axially in the body between the second
position and the first position, and in that the
15 additional cam means comprise transverse surfaces (15)
extending into the front empty space (17).

8. A device according to claim 1, characterized in that
the jaws (5.1, 5.2) include means (20, 21) for securing
20 them axially to each other.

9. A device according to claim 8, characterized in that
the axial securing means comprise complementary axial
25 abutment means (20, 21) secured to each of the jaws, said
abutment means being arranged to leave the jaws (5.1,
5.2) free to slide apart from and towards each other.

10. A device according to claim 1, characterized in that,
in the vicinity of the jaws (5.1, 5.2) in their first
30 position, the body (1) includes resilient means (4) for
holding the jaws in their grip state.

11. A device according to claim 1, characterized in that
the jaws (5.1, 5.2) are provided internally with teeth
35 (10) for biting into an outside surface of the pipe end.

12. A device according to claim 1, characterized in that at least one of the jaws (5.1, 5.2), when in its second position, possesses an end that projects from the body.

5 13. A device according to claim 1, characterized in that it includes angular indexing means (11, 14) for indexing the angular position of the retaining member (5) relative to the body (1).

10 14. A device according to claim 13, characterized in that it includes means (22) for preventing the pipe end (100) from turning relative to the retaining member (5).